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Journal of Advanced Ceramics is a peer-reviewed, open access international journal published on behalf of the State Key Laboratory of New Ceramics and Fine Processing (Tsinghua University, China) and the Advanced Ceramics Division of the Chinese Ceramic Society.

Journal of Advanced Ceramics publishes the results of original research and reviews relating to advanced ceramics. The emphasis is on novel generic science concerning the relationship between processing, microstructure, and properties of particulates, dense or porous bodies, thin/thick films and laminated, graded and composite structures, etc.

Please note that not all topics fall within the scope of *Journal of Advanced Ceramics*. Some examples for the topics that are not suitable for publication in *Journal of Advanced Ceramics* are: (1) traditional ceramics and porcelain; (2) glasses and glass-ceramics; (3) concretes and traditional refractories; (4) ceramic-containing metal- or polymer-matrix composites; (5) biological characterization; (6) theoretical model without a comparison with experimental results.

Instructions for Authors

Please note that, since the Journal currently receives many more contributions than it is possible to accept, [the submissions which were not well prepared according to these Instructions may be rejected directly without further review.](#)

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1 Manuscript Submission

Legal requirements

Submission of a manuscript to *Journal of Advanced Ceramics* implies: that the work described has not been published before in any format including in languages other than English; that is not under consideration for publication anywhere else; that its submission and publication has been approved by all co-authors, if any, as well as by the responsible authorities at the institute where the work has been carried out. The publisher will not be held legally responsible should there be any claims for compensation.

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- Cover letter and graphical abstract.
- Manuscript containing title page, abstract and keywords, and main body.
- All figures should be supplied in individual electronic files.

2 Manuscript Preparation

2.1 Article types

Journal of Advanced Ceramics publishes regular research articles, rapid communications, and review articles.

Regular research article

Regular research articles report significant original research on, or techniques for studying, the fundamental relationships between processing, microstructure, and properties of advanced ceramics, either in 0, 1, 2, or 3-dimensional forms. In principle, a regular research article should be longer than 8 printed pages and a manuscript which does not meet these requirements will be returned directly without review. When preparing a manuscript, please keep in mind that a printed page contains approximately 700 words including equivalent word counts for figures and tables.

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Rapid communications, limited to 4 printed pages in length, emphasize on the new findings of exceptional novelty. When submitting a rapid communication, the authors should clearly indicate its novelty in a cover letter.

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Review articles are intended to be topical, comprehensive summaries of the state-of-the-art in a particular aspect. Clear conclusions should be produced which are more far reaching than the sum of the individual papers reviewed. There is no page limit for review articles. When submitting a review article, the author should state in a cover letter the community's need for the review and the differences between this review and others that has been published elsewhere. It is strongly suggested that the prospective authors of review articles should [contact the Executive Editor](#) before preparing their articles.

Journal of Advanced Ceramics also publishes Comments and Replies. Any reader may submit for publication a comment on any paper that has been published in the Journal and the author of the paper will be invited to reply. Comments and Replies are limited to two printed pages.

2.2 Manuscript format

Language

The Journal's language is English. Either British English or American English spelling and terminology may be used, but the system chosen should be followed consistently throughout the manuscript. We request that the language is corrected before submission. The Journal's editors are not responsible for correcting errors in grammar to spelling. [Articles that require extensive English revision may be rejected directly without further review.](#)

Text formatting

For submission in Microsoft Word, use a normal, plain font (e.g., 12 point Times New Roman), double space line, and one column for text. Use the automatic page numbering function to number the pages. Do not use field functions. Use tab stops or other commands for indents, not the space bar. Use the table function, not spreadsheets, to make tables. Use the equation editor or MathType for equations. Note: If you use Word 2007, do not create the equations with the default equation editor but use MathType instead.

3 Detailed Formatting Instructions

Please follow this order to type the manuscript: cover letter, title page, abstract, keywords, main text (including tables and figures), appendix (if necessary), acknowledgements, declaration of competing interest, references, graphical abstract, and electronic supplementary material (if necessary).

Cover letter

All submissions must include a cover letter that includes:

- A confirmation of author representations that: the work described has not been published before; it is not under consideration for publication anywhere; and publication has been approved by all co-authors and the responsible authorities at the institute(s) where the work has been carried out.
- A statement of 3–5 sentences, of the novelty and significance of the work.
- If the submission has previously been considered for publication by any other journal, the cover letter should include the manuscript's previous submission history and response to referees' comments, as an appendix to the cover letter.

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Please select the item "Supplementary Material", filling the "Description" with "Cover letter", to unload the cover letter.

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The title page should include:

- A concise and informative title.
- The name(s) of the author(s), with symbols to line each name with that author's institutional affiliation and an asterisk to denote the corresponding author(s).
- The affiliations and mailing addresses of the authors.
- The e-mail address(es) of the corresponding author(s).

Title should be succinct, objective, interesting, and grammatically correct. The use of abbreviations in title is discouraged.

The author list should include only those who have made significant scientific contributions to the manuscript. Others who have contributed to the work should be noted in the

Acknowledgements.

Changes to the author list between initial submission and revision must be accompanied by an explanatory statement in the cover letter for the revision and a completed "Change in Authorship Request" form, which will be sent by the Journal Editorial Office. These changes will be accepted at the discretion of the Editor and may lead to rejection of the manuscript. Changes of authorship or the order of authors are *not* accepted *after* acceptance of a manuscript.

Abstract and keywords

A concise and factual abstract not exceeding 250 words must be provided with each paper except Comments and Replies. The abstract should state briefly the purpose of the research, the principal results, and major conclusions. No footnotes, references, figures, or tables may appear in the abstract.

Immediately after the abstract, provide a maximum 6 keywords which can be used for indexing purposes.

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Manuscripts describing original research typically include the following sections: Introduction; Materials and method; Results; Discussion; Conclusions; Acknowledgements; References. In submissions that have a significant theoretical or mathematical component, a section for the description of the analytical procedures may be required.

Heading/section levels (numbered). For regular research papers and review articles, please use the decimal system of headings. Please divide your manuscript into clearly defined and numbered sections and subsections. Sections should be numbered 1, 2, etc. (The abstract is not included in section numbering). Subsections should be numbered 1.1 (then 1.1.1, 1.1.2 ...), 1.2, etc. Use this numbering also for internal cross-referencing: do not just refer to "the text". Each section and subsection should be given a brief heading and each heading should appear on its own separate line. For short papers, no section levels are needed.

Footnotes. Essential footnotes to the text should be numbered consecutively and placed at the bottom of the page to which they refer. Footnotes to the table should be indicated by superscript lower-case letters (or asterisks) and placed immediately below the table.

Formulae and symbols. Formulae, symbols, and all subscripts, superscripts, Greek letters, and other characters must be legible and carefully checked. Standard mathematical notation should be used. All symbols used in manuscript must be explained. If necessary, a list of symbols may be provided and placed before the Introduction section.

Equations. Numbering consecutively any equations that have to be displayed separately from the text (if referred to explicitly in the text), and referring the equation with Eq. (1), Eq. (2) ... in the text. For the simple formulae which appear in the line of normal text, please use solidus (/) instead of a horizontal line for small fractional terms, e.g., x/y . Powers of e are often more conveniently denoted by "exp". In principle, variables should be presented in italics.

Figures. All digital arts, including micrographs, line arts, and grayscale images, included in the manuscript should be supplied in a separate electronic file in TIFF, EPS, or JPEG format with a preferred resolution of 600 dpi relative to the final figure size. All figures should be numbered using Arab numerals (figure parts should be denoted by lowercase letters) and supplied with a figure caption. Please make sure that all elements found in the figure are identified in the caption. Figures should always be cited in text, such as Fig. 1, Fig. 2 ... in consecutive numerical order. Color figures will remain in color in both the printed version and the online version of the journal, at no cost. The

authors are encouraged to use color figures in the submitted manuscript.

Tables. All tables should be numbered using Arab numerals and supplied with a table title which explains clearly and concisely the components of the table. Tables should not duplicate results presented elsewhere in the manuscript (for example, in figures). Tables should always be cited in the text, such as Table 1, Table 2 ... in consecutive numerical order.

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Appendix. An appendix, if needed, is presented without numbers. If there are two or more appendices, they should be numbered consecutively. Equations in appendices should be designated differently from those in the main body of the manuscript, e.g., (A1), (A2), etc. In each appendix equations should be numbered separately.

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Compliance with ethical standards

Declaration of competing interest The authors have no competing interests to declare that are relevant to the content of this article.

Ethical approval This study does not contain any studies with human or animal subjects performed by any of the authors.

Citations & references. References to the literature are cited by *number in square brackets* at appropriate locations (*before* a period, comma, etc.) in the text. Some examples are given below:

(1) There are several different methods, such as chemical precipitation [1], hydrothermal [2–4], sol–gel [2,5,6], and mechanochemical methods [7,8].

(2) This phenomenon was originally observed by John and Williams [1] in 1980.

(3) This effect has been widely studied [1–3,7].

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All literature citations should be compiled in a *numbered reference list* at the end of the manuscript text (but before the Appendices), in the order of their *first* citation in the text. Each numbered reference may contain only *one* literature citation. The list of references should only include works that are cited in the text and that have been published or accepted for publication. Papers accepted for publication are cited as "in press" and the DOI. Always use the standard abbreviation of a journal's name according to the ISSN List of Title World Abbreviations

(<https://www.issn.org/services/online-services/access-to-the-ltwa/>). Some examples:

(a) Journal article

[1] Han YC, Li SP, Wang XY, *et al.* Synthesis and sintering of nanocrystalline hydroxyapatite powders by citric acid sol-gel combustion method. *Mater Res Bull* 2004, **39**: 25–32.

(b) Book (authored)

[2] Lawn BR. *Fracture of Brittle Solids*. Cambridge (UK): Cambridge University Press, 1993.

(c) Book chapter and paper in Proceedings

[3] Craighead HG. Nanostructures in electronics. In: *Nanomaterials: Synthesis, Properties and Applications*. Edelstein A, Cammatata R, Eds. New York: Taylor and Francis, 1998: 565–566.

(d) Others

[4] Hammond PW. Four-quadrant AC-AC drive and method. U.S. patent 6 166 513, Dec. 2000.

[5] Peng ZJ. Surface modification of ceramic cutting tools by energetic ions. Ph.D. Thesis. Beijing (China): Tsinghua University, 2002.

[6] Information on <http://www.weld.labs.gov.cn>.

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All digital arts, including line arts, data plots and halftone arts, included in the manuscript should be supplied in a separate electronic file in TIFF, EPS, or JPEG format. Please note that **a submission will be rejected directly without review if the submitted electronic figures do not meet the following guidelines.**

Electronic figure submission

- Supply all figures electronically. Authors are encouraged to embed their figures in the document near the paragraph in which there are first referenced.
- Name figure files with "Fig" and the figure number, e.g., Fig1.jpg.
- Please do not supply: (i) files that are optimized for screen use because these typically have a low number of pixels and limited set of colors; (ii) files that are too low in resolution; (iii) graphics that are disproportionately large for the content.

Line arts

- Definition: black and white graphic with no shading.
- Do not use faint lines and/or lettering and check that all lines and lettering within the figures are legible at final size.
- All lines should be at least 0.1 mm (0.3 pt) wide.
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- Definition: graphical representation of data to reveal relationships between variables.
- Plots should follow guidelines for line art with font sizes and file resolution. All plots should use a white background.
- Simple geometric symbols (e.g., open and filled triangles, squares, circles, etc.) should be used

for data points, with capped error bars to denote the precision of measurements.

- Axes should be labeled with the appropriate units included in parentheses.
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- Halftone arts include micrographs, photographs, drawings, or paintings with fine shading, etc.
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- Keep lettering consistently sized throughout your final-sized artwork, **usually about 8–12 pt.**
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- Avoid effects such as shading, outline letters, etc.
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- All figures should be numbered using Arab numerals (figure parts should be denoted by lowercase letters).
- Figures should always be cited in text, such as Fig. 1, Fig. 2, in consecutive numerical order.
- Each figure should have a concise caption describing accurately what the figure depicts. Include the captions in the text file of the manuscript, *not* in the figure file.
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The Journal follows a single-blind reviewing procedure. The benefit of single-blind peer review is that it is the traditional model of peer review that many reviewers are comfortable with, and it facilitates a dispassionate critique of a manuscript.

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